

BIOHACK NOTES



BIODIVERSITY AND CONSERVATION

- BASED ON ACTIVE RECALL AND SPACED REPETITION
- TARGET 360/360 IN NEET BIOLOGY & 100/100 IN BOARDS!



PARTH GOYAL

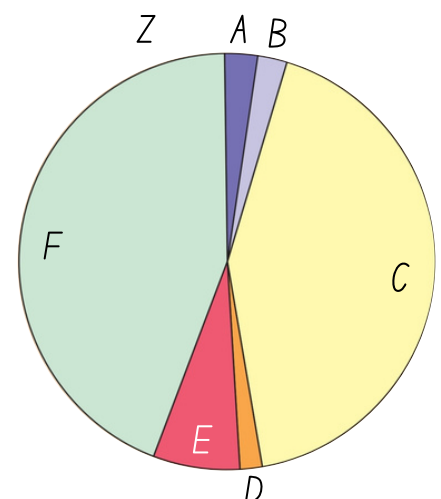
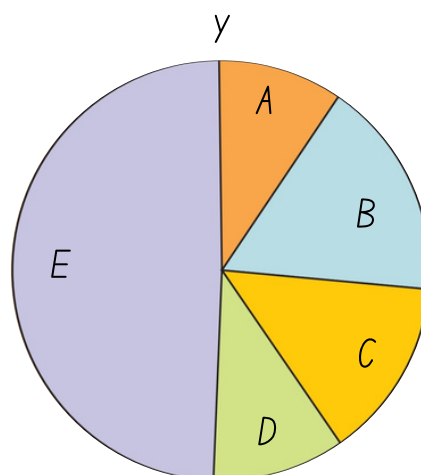
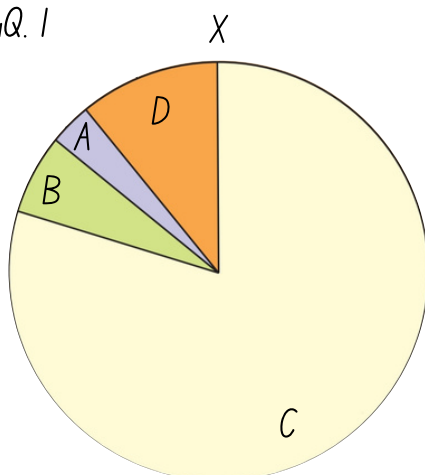




• BIODIVERSITY

1. No. of species of ants -
2. No. of species of beetle -
3. No. of species of fishes -
4. No. of species of orchids -
5. Biodiversity term is popularised by ecologist/sociobiologist named _____ (NEET)
6. The 3 types of diversity are -
7. Ex. of genetic diversity - (I)
8. Rauwolfia vomitoria is a medicinal plant. T/F
9. They have a active chemical called -
10. > _____ genetically different strains of rice in India. (NEET)
11. > _____ varieties of mango in India.
12. Eastern Ghats have a greater amphibian species diversity than Western Ghats. T/F (NEET)
13. At ecosystem level india have greater biodiversity than _____
14. Norway is a _____ country.
15. Total no. of plants and animal species described till now are around _____ million.
16. _____ made a scientifically sound estimate of _____ million global species diversity.
17. More than _____ % of all species recorded are animals.
18. Plants comprise no more than _____ % of total.
19. _____ % of animal species are insects. (NEET)
20. The number of _____ species in the world is more than the combined total of the species of fishes, amphibians, reptiles and mammals. (NEET)
21. Biologists are not sure about how many prokaryotic species there might be. T/F
22. India has only _____ % of world's land area, its share in global species diversity is _____ %. (NEET)
23. India is in the 12 mega diversity countries of the world. T/F (NEET)
24. According to May, only _____ % of the total species are recorded so far.

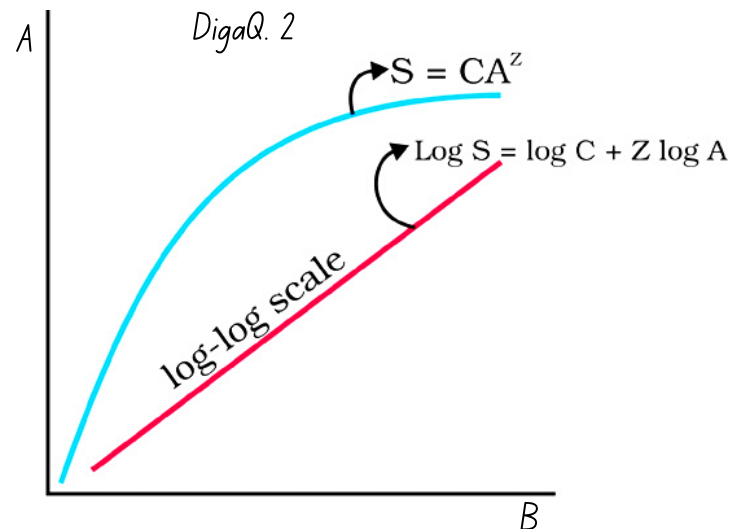
DigaQ. 1





• PATTERNS OF BIODIVERSITY

25. Species diversity increases as we move away from equator to the poles. T/F
26. Colombia has nearly _____ species while New York has _____ species and Greenland have only _____ species of birds.
27. India have more than _____ species of birds.
28. _____ rain forest in _____ (continent) has the greatest biodiversity on earth.
29. _____ species of plants, _____ of fishes, _____ of birds, _____ of mammals, _____ of amphibians, _____ of reptiles and of more than _____ invertebrates are found in amazon.
30. Why diversity is more in tropics. Give reasons (3) -
31. In North American/South American jungles, _____ (scientist name) worked.
32. He was a British/German naturalist/philosopher and observed that - (NEET)
33. Graph between species richness and area for a wide variety of taxa turns out to be a _____ curve.
34. Value of Z lies in the range of ____ to ____
35. With change in region or taxonomic group under study, the value of Z also change. T/F
36. Value of Z on analysing on continents become _____ to _____
37. Areas with more species diversity show less year to year variation in biomass. T/F
38. Increased diversity means higher productivity. T/F
39. Above two statements were given by the scientist -
40. Rivet popper hypothesis was given by _____
41. Species were compared with _____ of aeroplanes.
42. Flight safety was compared with _____



• LOSS OF BIODIVERSITY

43. The IUCN Red List documented extinction of _____ (no.) species in last 500 years.
44. _____ no. of vertebrates, _____ no. of invertebrates and _____ no. of plants got extinct.
45. Name ex. of recent extinctions. (7)
46. Dodo country -
47. Quagga country -
48. Extinction ex from Russia -
49. Extinction ex from Australia -
50. Amphibians are more vulnerable to extinction. T/F (NEET)



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51. _____ % of amphibian species are facing the threat of extinction. (NEET)
52. _____ % of birds, _____ % of mammals, _____ % of gymnosperms are facing extinction threat.
53. Loss of biodiversity leads to decline in plant production. T/F
54. Name all the Evil Quartet. (NEET)
55. Most important cause of extinction is - (NEET)
56. _____ is called the lungs of the planet.
57. Ex. of extinctions due to over-exploitation are - (2)
58. _____ introduced in Lake Victoria in West/East Africa. (NEET)
59. It caused extinction of more than 100/200 species of _____ (NEET)
60. Invasive weeds ex - (3) (NEET)
61. Introduction of American/African catfish called _____ is posing threats to indigenous catfish.



• BIODIVERSITY CONSERVATION

62. Reasons why we should conserve biodiversity are grouped into 3 categories. Name them.
63. More than _____ % of drugs currently sold in the market worldwide are derived from plants.
64. _____ species of plants contribute to the traditional medicines.
65. Aesthetic pleasures are categorised into _____ category.
66. When an animal or plant is at a very high risk of extinction, it is conserved by in situ/ex situ. (NEET)
67. What is endemism ? (NEET)
68. Total no. biodiversity hotspots in the world are - (NEET)
69. 3 of these hotspots present in our country are - (NEET)
70. All hotspots put together cover less than _____ % of earth's land area. (NEET)
71. No. of biosphere reserves in India -
72. No. of national parks in India -
73. No. of Wildlife sanctuaries in India -
74. 3 areas of Madhya Pradesh that are sacred groves - (NEET)
75. 2 areas of Meghalaya that are sacred groves - (NEET)
76. Sacred grooves are found in areas - (4) (NEET)
77. Ex. of ex-situ conservation are - (3)
78. The Earth Summit was held in city _____ in year _____ (NEET)
79. World Summit on Sustainable Development was held in _____ (year) in _____ city of _____ (country).
80. In it, _____ no. of countries pledged their commitment to achieve by year _____, a significant reduction in rate of biodiversity loss.



BIODIVERSITY AND CONSERVATION



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ANSWERS

• BIODIVERSITY

1. 20,000
2. 3,00,000
3. 28,000
4. 20,000
5. Sociobiologist, Edward Wilson
6. Genetic diversity, species diversity, ecological diversity
7. *Rauwolfia vomitoria*
8. T
9. Reserpine
10. 50,000
11. 1,000
12. F
13. Norway
14. Scandinavian
15. 1.5
16. Robert May, 7
17. 70
18. 22
19. 70
20. Fungi
21. T
22. 2.4, 8.1
23. T
24. 22

• PATTERNS OF BIODIVERSITY

25. F
26. 1,400, 105, 56
27. 1,200
28. Amazonian Rain forest, South America
29. 40,000 species of plants, 3,000 of fishes, 1,300 of birds, 427 of mammals, 427 of amphibians, 378 of reptiles, 1,25,000 of invertebrates

30. Reasons for more diversity in tropics:

- I. Tropical env. hasn't undergone glaciation
- II. Tropical environment are less seasonal
- III. There is more solar energy in tropics

31. South American, Alexander von Humboldt
32. German naturalist, species richness increase with increasing explored area, but only upto a limit
33. Rectangular hyprbola
34. 0.1 to 0.2
35. F
36. 0.6 to 1.2
37. T
38. T
39. David Tilman
40. Paul Ehrlich
41. Rivlets
42. Proper functioning of ecosystem

• LOSS OF BIODIVERSITY

43. 784
44. 338 vertebrates, 359 invertebrates and 87 plants
45. Dodo, quagga, thylacine, Steller's Sea Cow, and three subspecies (Bali, Javan, Caspian) of tiger
46. Mauritius
47. Africa
48. Steller's Sea Cow
49. Thylacine
50. T
51. 32 %
52. 12 % of bird, 23 % of mammal and 31 % of gymnosperm
53. T



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54. The Evil Quartet

I. Habitat loss and fragmentation

II. Over-exploitation

III. Alien species invasions

IV. Co-extinctions

55. Habitat loss and fragmentation

56. Amazon rainforest

57. Steller's sea cow & Passenger pigeon

58. Nile perch, east africa

59. 200, cichlid fish

60. carrot grass (Parthenium), Lantana and water hyacinth (Eicchornia)

61. African, Clarias gariepinus

• BIODIVERSITY CONSERVATION

62. Narrowly utilitarian, broadly utilitarian, ethical

63. 25

64. 25,000

65. Broadly utilitarian

66. Ex situ

67. species confined to that region and not found anywhere else

68. 34

69. Western Ghats (Sri Lanka also take a part in it), Indo-Burma and Himalaya

70. 2

71. 14

72. 90

73. 448

74. Sarguja, Chanda and Bastar

75. Khasi and Jaintia Hills

76. Khasi and Jaintia Hills in Meghalaya, Aravalli

Hills of Rajasthan, Western Ghat regions of Karnataka and Maharashtra and the Sarguja, Chanda and Bastar areas of Madhya Pradesh

77. Zoological parks, botanical gardens and wildlife safari parks

78. Rio de Janeiro, 1992

79. 2002, Johannesburg, south africa

80. 190, 2010

• DigaQs

DigaQ. 1 - Global biodiversity

X - Invertebrates

A - Crustaceans

B - Molluscs

C - Insects

D - Other animals

Y - Vertebrates

A - Mammals

B - Birds

C - Reptiles

D - Amphibians

E - Fishes

Z - Plants & Fungi

A - Mosses

B - Fern & allies

C - Angiosperms

D - Lichens

E - Algae

F - Fungi

DigaQ. 2 - Species area relationship

A - Species richness

B - Area



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SCAN AND DONATE US SO THAT WE
CAN CREATE MORE SUCH QUALITY
CONTENT FOR YOU!

**Day 14 into quarantine: Dolphins
are back at the coasts of Italy
due to absence of ships**

Day 137:



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